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**Background Information And Technical Support Document
For Proposed Amendments To**

310 CMR 7.00 et seq.

310 CMR 7.25

Best Available Controls for Consumer and Commercial Products

**Architectural and Industrial Maintenance Coatings
Consumer Products**

Regulatory Authority:
M.G.L. Chapter 111, §§ 142A through 142N

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TABLE OF CONTENTS

I.	Introduction	3
II.	Background	3
	A. Ozone and Ozone Precursors	3
	B. Massachusetts Ozone Non-Attainment Status	3
	C. Existing Regulations	4
	D. Ozone Transport Commission Model Rules	4
III.	Summary of the Proposed Regulations	5
	A. AIM Coatings Regulation	5
	i. Applicability and Compliance Date	5
	ii. VOC Emission Standards	6
	iii. Flexibility Measures	10
	iv. Labeling, Recordkeeping, and Reporting Requirements	10
	v. Testing	10
	B. Consumer Products Regulation	10
	i. Applicability and Compliance Date	10
	ii. VOC Emission Standards	11
	iii. Flexibility Measures	17
	iv. Labeling, Recordkeeping, and Reporting Requirements	17
	v. Testing	17
IV.	Emission Reductions	18
	A. AIM Coatings	18
	B. Consumer Products	18
V.	Economic Impacts	19
	A. AIM Coatings	19
	i. Cost Effectiveness	20
	ii. Potential Business and Consumer Impacts	20
	B. Consumer Products	21
	i. Cost Effectiveness	21
	ii. Potential Business and Consumer Impacts	21
VI.	Impact on Other DEP Programs	22
	A. Air Toxics	22
	B. Toxics Use Reduction	23
VII.	Agricultural Impacts	23
VIII.	Impact on Massachusetts Municipalities	23
IX.	Massachusetts Environmental Policy Act (MEPA)	23
X.	Requests for Comments	23

I. INTRODUCTION

The Massachusetts Department of Environmental Protection (MassDEP) is proposing to amend its regulations for Best Available Controls for Consumer and Commercial Products, 310 CMR 7.25 (hereinafter referred to as the “proposed amendments”), to further reduce emissions of volatile organic compounds (VOCs) from architectural and industrial maintenance (AIM) coatings (e.g., paints, stains, varnishes, etc.) and consumer products (e.g., household cleaners, hairsprays, etc.). These proposed amendments are part of Massachusetts’ strategy to reduce ground-level ozone in order to meet the national 8-hour ozone air quality standard, for which Massachusetts is currently in nonattainment. This document provides background information on the proposed amendments.

AIM coatings and consumer products emit a significant amount of VOCs. VOCs contribute to the formation of ground-level ozone, or smog, which adversely affects public health and damages forests and vegetation. Many VOCs also are toxic and, at sufficient concentrations and exposure, are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or to cause adverse environmental effects.

Reducing VOC emissions from AIM coatings and consumer products will substantially benefit public health and the environment by reducing ozone and reducing consumer exposure to toxic chemicals. To achieve this public health and environmental benefit and to help bring Massachusetts into attainment with the national 8-hour ozone standard, the proposed amendments lower many of the existing VOC limits for AIM coatings and consumer products and expand the universe of coatings and products subject to VOC limits. These proposed amendments are based on similar control measures that California and several other New England states already have adopted.

II. BACKGROUND

A. Ozone and Ozone Precursors

Ground-level ozone is a photochemical oxidant that can cause lung dysfunction and eye, nose and throat irritation. Ozone is formed when volatile organic compounds (VOCs) react with oxides of nitrogen (NO_x) in the presence of sunlight and heat. Unhealthy concentrations of ozone occur most frequently during hot summer months.

Ozone irritates the respiratory system and may cause coughing and shortness of breath. It also can exacerbate respiratory illness and reduce resistance to infection. Ozone is of particular concern for children, people with asthma and other chronic respiratory diseases, and people exercising and working outdoors for prolonged periods of time. Ozone also damages forests and other vegetation, agricultural crops, and natural and synthetic materials.

B. Massachusetts Ozone Non-Attainment Status

Pursuant to the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) has established health-based National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: ozone; nitrogen dioxide; particulate matter; carbon monoxide; sulfur dioxide; and lead. Massachusetts is in attainment with all of the NAAQS except the 8-hour ozone standard¹. Massachusetts has two ozone non-attainment areas. The western Massachusetts non-attainment area encompasses Hampden, Hampshire, Franklin and Berkshire counties. The eastern Massachusetts non-attainment area encompasses the remainder of the state. In 2004, both areas were classified as moderate non-attainment areas under the 8-hour ozone standard. Due to transport, emissions in Massachusetts also contribute to violations of the 8-hour standard in southern New Hampshire and Maine.

¹ EPA promulgated the 8-hour ozone standard in 1997 to update the previous 1-hour ozone standard. EPA revoked the 1-hour ozone standard in 2005.

In June 2007, Massachusetts is required to submit to EPA a State Implementation Plan (SIP) that will demonstrate how it will attain the 8-hour ozone standard statewide by 2010. The proposed Best Available Controls for Consumer and Commercial Products regulations are part of MassDEP's efforts to reduce emissions of ozone precursors in order to attain the 8-hour ozone standard by 2010 and to mitigate Massachusetts' contribution to ozone violations in downwind states. MassDEP will include these regulations in its 8-hour ozone SIP submittal due to EPA in June 2007. The emission reductions from these amendments and other forthcoming regulations will be reflected in the attainment modeling demonstration that is required in the SIP submittal. These emission reductions, combined with emission reductions achieved in upwind states, are designed to bring Massachusetts into attainment with the 8-hour ozone standard.

C. Existing Massachusetts and Federal Regulations

Massachusetts adopted Best Available Controls for Consumer and Commercial Products, 310 CMR 7.25, on October 1, 1995, as one of many control programs designed to address nonattainment with the 1-hour ozone standard that was in effect at that time. The regulation set specific VOC emission limits for AIM Coatings, 310 CMR 7.25(11), and Consumer Products, 310 CMR 7.25(12). In anticipation of forthcoming federal VOC limits, the regulations provided that any future EPA emission standards would supersede the standards specified in 310 CMR 7.25.

Pursuant to Section 183(e) of the Clean Air Act (CAA), EPA promulgated National Volatile Organic Compound Emission Standards for Consumer Products (40 CFR Part 59) and National Volatile Organic Compound Emission Standards for AIM Coatings (40 CFR Part 59), effective December 10, 1998 and September 13, 1999, respectively. Since EPA's VOC limits superseded the Massachusetts' limits, EPA's VOC limits for AIM coatings and consumer products are currently in effect in Massachusetts.

D. Ozone Transport Commission Model Rules

MassDEP has based the proposed AIM coatings and consumer products amendments on the Ozone Transport Commission's (OTC's)² 2001 AIM coatings model rule and 2006 consumer products model rule, respectively.

In 2000, to address 1-hour ozone nonattainment throughout the OTR, Massachusetts and other OTC states signed a Memorandum of Understanding (MOU) committing to adopt more stringent controls on AIM coatings and consumer products. In 2001, OTC developed model rules for use by the states that were based on rules developed by the California Air Resources Board (CARB) that established VOC limits that were more stringent than EPA's national rule but still technically and economically feasible.

OTC based its AIM model rule on CARB's Suggested Control Measure (SCM) for Architectural Coatings, which is a model rule for use by California's Air Quality Districts. OTC based its consumer products model rule on CARB's then-current statewide consumer products rule. In developing the model rules, OTC solicited comments from AIM and consumer products manufacturers and other stakeholders and included in the model rules a number of provisions that gave OTC states flexibility in how they develop and implement the rules. To date, several of the OTC states have adopted the 2001 AIM and consumer products model rules³.

More recently, in June 2006, Massachusetts and other OTC states signed an MOU committing to pursue further controls on consumer products to address nonattainment with the 8-hour ozone standard. To

² Section 184(a) of the CAA established the Northeast Ozone Transport Region (OTR) and the Ozone Transport Commission (OTC). The OTR is comprised of the District of Columbia, a portion of Northern Virginia, and the states of Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, Pennsylvania, New Jersey, Delaware, and Maryland. The CAA requires the OTC to assess the degree of interstate transport of ozone and its precursors throughout the OTR and recommend strategies that would help states in the OTR meet the NAAQS for ozone.

³ The District of Columbia, Northern Virginia, Maine, New York, Pennsylvania, New Jersey, Delaware, and Maryland have adopted rules based on the OTC AIM coatings and consumer products model rules. New Hampshire has adopted a consumer products rule based on the OTC model rule.

support these controls, OTC has updated its consumer products model rule to incorporate the July 2005 updates that CARB made to its consumer products rule. Therefore, the amendments MassDEP is proposing are based on OTC's 2001 AIM model rule and OTC's 2006 consumer products model rule⁴.

III. SUMMARY OF PROPOSED AMENDMENTS

The proposed amendments replace the existing Best Available Controls for Consumer and Commercial Products regulations, 310 CMR 7.25(1) through (12) in their entirety. To maintain continuity between the proposed amendments and the existing regulations, the requirements specific to AIM Coatings and Consumer Products are retained under the same subsections of 310 CMR 7.25(11) and 310 CMR 7.25(12), respectively. Sections (4) through (10) of the existing regulations are either eliminated or incorporated into the proposed amendments as follows:

- 7.25(4), Prohibition of Specification: Incorporated into 7.25(11) since it applies to AIM Coatings only.
- 7.25(5), EPA Override Provision: Eliminated since this provision is no longer applicable.
- 7.25(6), FIFRA Registered Product Exemptions: Incorporated into 7.25(11) and (12). These provisions allow products that are registered under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) an additional year to comply with the VOC limits, and exempt these products from the AIM Coatings and Consumer Products labeling requirements.
- 7.25(7), Innovative Products Exemption: Incorporated into 7.25(12), which applies to Consumer Products only. This exemption was not included in the OTC AIM model rule. MassDEP has never received an Innovative Products exemption request under the existing AIM rule, and believes such an exemption is not needed since coating application methods are well developed and standardized and it is unlikely that any new technology would be developed that could meet the requirements of an Innovative Product Exemption.
- 7.25(8), Compliance Certification Requirements: Eliminated to streamline reporting requirements. MassDEP proposes that companies should no longer be required to submit compliance certifications to MassDEP. Companies would still be required to keep certain information for compliance verification on site and submit that information to MassDEP upon request.
- 7.25(9) and (10) Reserved: These provisions remain reserved. Sections (4) through (8) also become Reserved since these sections are eliminated or incorporated into Sections (11) and (12).

A. AIM Coatings Regulation

i. Applicability and Compliance Date

The proposed amendments to AIM Coatings [310 CMR 7.25(11)] apply to any person who sells, supplies, offers for sale, blends or repackages for sale, or manufactures AIM coatings for use in Massachusetts after January 1, 2009, as well as any person who applies or solicits the application of any AIM coating in Massachusetts on or after January 1, 2009. The proposed amendments do not apply to any person who sells, supplies, offers for sale, blends or repackages for sale, or manufactures: 1) any AIM coating manufactured in Massachusetts for shipment and use exclusively outside of Massachusetts (however, these coatings should meet the standards in the state in which they are sold or used); 2) any AIM coating manufactured before January 1, 2009; 3) any AIM coating sold in a container with a volume of one liter or less; and 4) any aerosol product.

Since many California air quality districts and OTC states already have adopted AIM coatings VOC limits similar to those that MassDEP is proposing, compliant products are already available on the market. Manufacturers can achieve compliance with the proposed VOC limits by using product reformulations that are similar to the available compliant products in other jurisdictions.

⁴ These model rules and the 2000 and 2006 MOUs are available on OTC's website at www.otc.org.

ii. VOC Emission Standards

The current VOC limits for AIM coatings in Massachusetts are the same as EPA's limits. The proposed amendments lower the VOC limits for most of the existing AIM coating categories and set limits for several new product categories. Table A shows a comparison of the proposed VOC limits with the current limits. While there are differences in how the coating categories/subcategories are defined, the proposed amendments cover all the coatings covered by the existing EPA rule. Table B shows how specialty coating categories defined under EPA's rule but not under the proposed amendments will be covered by the proposed amendments.

The VOC limits in the proposed amendments are at least as stringent as the VOC limits in EPA's rule; therefore, compliance with the MassDEP proposed VOC limits will satisfy compliance with EPA's limits. The one exception is for coatings that contain post-consumer recycled materials. The proposed amendments set a VOC limit of 250 grams per liter (g/l) for these coatings. EPA's rule provides a formula to calculate an adjusted-VOC content for a product based on the amount of post-consumer recycled coating in the product, which is then compared to the EPA VOC standard for that product category. Consequently, a product that is compliant with the MassDEP proposed limit of 250 g/l may not be compliant with the Federal rule depending on its post-consumer recycled coating content if the EPA VOC content limit for the coating category is less than 250 g/l⁵. MassDEP believes that the proposed VOC limit of 250 g/l results in lower VOC emissions from recycled coatings compared to the federal regulation in most cases, simplifies the administrative requirements for compliance verification for such coatings, and still provides an incentive for recycling because it is less stringent than the otherwise applicable VOC limits for coatings used in highest volumes and most recycled, namely flat and non-flat coatings (i.e., 100 g/l and 150 g/l, respectively).

⁵ Only two coating categories, i.e., Traffic Marking Coatings and Lows-Solids Coatings, which have a VOC limit of 150 g/l and 120 g/l respectively, have a lower federal VOC limit than the MassDEP proposed limit for recycled coatings.

Table A. Comparison of Proposed VOC Content Limits to Existing EPA Limits

Coating Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
GENERAL COATINGS		
Flat Coatings	100	250 ¹
Non-Flat Coatings	150	380 ²
Non-Flat High-Gloss Coatings	250	
SPECIALTY COATINGS		
Antenna Coatings	530	530
Antifouling Coatings	400	450
Bituminous Roof Coatings	300	500 ³
Bituminous Roof Primers	350	500 ³
Bond Breakers	350	600
Calcimine Recoater	475	475
Clear Wood Coatings		
Clear Brushing Lacquers	680	
Lacquers (including lacquer sanding sealers)	550	680
Sanding Sealers (other than lacquer sanding sealers)	350	
Varnishes	350	450
Concrete Curing Compounds	350	350
Concrete Surface Retarders	780	780
Conversion Varnishes	725	725
Dry Fog Coatings	400	400
Faux Finishing Coatings	350	700 ⁴
Fire Resistive Coatings	350	850/450 ⁵
Fire Retardant Coatings ⁵		
Clear	650	850
Opaque	350	450
Floor Coatings	250	400
Flow Coatings	420	450
Form-Release Compounds	250	450
Graphic Arts Coatings (Sign Paints)	500	500
High Temperature Coatings	420	650/420 ⁶
Impacted Immersion Coatings	780	780
Industrial Maintenance Coatings	340	450
Low-Solids Coatings	120	120 ⁷
Magnesite Cement Coatings	450	600
Mastic Texture Coatings	300	300
Metallic Pigmented Coatings	500	500
Multi-Color Coatings	250	580

Coating Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Nuclear Coatings	450	450
Pretreatment Wash Primers	420	780
Primers, Sealers, and Undercoaters	200	350/400 ⁸
Quick Dry Enamels	250	450
Quick Dry Primers, Sealers and Undercoaters	200	450
Recycled Coatings	250	
Roof Coatings	250	250
Rust Preventative Coatings	340	400
Shellacs		
Clear	730	730 ⁹
Opaque	550	550 ¹⁰
Specialty Primers, Sealers, and Undercoaters	350	
Stains	250	550/350 ¹¹
Swimming Pool Coatings	340	600
Swimming Pool Repair and Maintenance Coatings	340	
Temperature-Indicator Safety Coatings¹²	550	
Thermoplastic Rubber Coatings and Mastics	550	550
Traffic Marking Coatings	150	150
Waterproofing Sealers¹³	250	600
Waterproofing Concrete/Masonry Sealers	400	
Wood Preservatives	350	550/550/550/350 ¹⁴

Notes:

^(a) A blank entry indicates that the specific category (or subcategory) is not defined under the federal rule.

¹ The federal rule divides the Flat Coatings category into Interior Flat Coatings and Exterior Flat Coatings both with the same VOC limit.

² The federal rule divides the Non-Flat Coatings category into Interior Non-Flat Coatings and Exterior Non-Flat Coatings, both with the same VOC limit.

³ The federal rule regulates Bituminous Coatings in general (with a limit of 500 g/l). The proposed amendment applies only to Bituminous Roof Coatings (with a limit of 300 g/l) and Bituminous Roof Primers (with a limit of 350 g/l).

⁴ This category is defined as Faux Finishing/Glazing in the federal rule.

⁵ The federal rule defines this category as Fire-Retardant and Fire-Resistive Coatings. The proposed amendment treats Fire-Retardant and Fire-Resistive Coatings separately. There are two subcategories in the federal rule for this category: Clear and Opaque.

⁶ The federal rule divides this category into High-Temperature Coatings and Heat-Reactive Coatings with the limits 650 and 420 g/l respectively.

⁷ The federal rule divides this coating into Low Solids Stains and Low Solids Wood Preservatives, both with the same VOC limit.

⁸ The federal rule has one category for Primers and Undercoaters (the first VOC limit listed) and another category for Sealers (the second VOC limit listed).

⁹ The federal definition for this category is significantly different than the definition in the proposed amendments.

¹⁰ See note number 9.

¹¹ The federal rule divides Stains into Clear and Semitransparent and Opaque, with VOC limits 550 and 350 respectively.

¹² Products in this category would be considered to be High-Temperature Coatings in the federal rule.

¹³ This category is defined as Waterproofing Sealers and Treatments in the federal rule.

¹⁴ The federal rule divides this category into Below Ground Wood Preservatives (550 g/l), Clear Wood Preservatives (550 g/l), Semitransparent Wood Preservatives (550 g/l), and Opaque Wood Preservatives (350 g/l).

Table B. How the Proposed Amendments Cover Specialty Coating Categories Defined Only in The EPA Rule

EPA Rule		Proposed Rule	
Coating Category	VOC Content Limit (g/l)	VOC Content Limit (g/l)	Coating Category
Anti-Graffiti Coatings ¹	600	340	Industrial Maintenance Coatings (permanent type)
		100/150	Flat or Non-Flat (sacrificial type)
Bituminous Coatings and Mastics	500	100/150	Flat or Non-Flat (for bituminous pavement sealers)
		300	Bituminous Roof Coatings
		350	Bituminous Roof Primers
		340	Industrial Maintenance Coatings
		500	Metallic Pigmented Coating (for bituminous aluminum roof coatings that meet the Metallic Pigmented Coating definition)
Chalkboard Resurfacers	450	340	Industrial Maintenance Coatings
Concrete Curing and Sealing Compounds	700	350/400	Concrete Curing Compounds/Water Proofing Concrete/Masonry Sealers
Concrete Protective Coatings	400	400	Water Proofing Concrete/Masonry Sealers
Extreme High Durability Coatings	800	340	Industrial Maintenance Coatings
Heat Reactive Coatings ²	420	340	Industrial Maintenance Coatings
Nonferrous Ornamental Metal Lacquers and Surface Protectants	870	400	Rust Preventive Coatings
Repair and Maintenance Thermoplastic Coatings	650	340	Industrial Maintenance Coatings
Stain Controllers	720	120 ³	Low Solids
Zone Marking Coatings	450	150	Traffic Marking

Notes:

¹ There are two types of anti-graffiti coatings: permanent and sacrificial. The EPA definition only covers the permanent type.² The EPA definition of Heat Reactive Coatings requires a minimum temperature of 375 to 400° F for product curing. This generally means that these coatings are baked or cured in an oven during product manufacturing and are not applied in the field to stationary objects. In this case these coatings are not subject to the AIM coatings regulations but are subject to the EPA metal coating and parts regulations. The proposed Industrial Maintenance Coatings category does apply when Heat Reactive Coatings are applied in the field such as on chemical storage tanks.³ Including water and exempt compounds.

iii. Flexibility Measures

The proposed amendments allow coatings manufactured before the new VOC limits take effect on January 1, 2009 to be sold up to three years after the compliance date provided the coatings complied with the limits in effect when they were manufactured⁶. This “sell-through” provision reduces the cost that manufacturers and distributors would incur in pulling non-compliant coatings off their shelves. The proposed amendments also allow a VOC limit of 250 g/l for recycled coatings, which is slightly higher than the VOC limit that would otherwise apply to the general purpose Flat and Non-Flat Coatings⁷, to provide an incentive to manufacturers to use recycled coatings in formulating their products.

iv. Labeling, Recordkeeping, and Reporting Requirements

The proposed amendments require labeling and recordkeeping to ensure compliance with the VOC limits. These requirements are consistent with current EPA labeling and recordkeeping requirements. Manufacturers must display the date (day, month, and year) or a code representing the date of manufacture on product and packaging labels. The manufacturer must file an explanation of the code with MassDEP by a) either January 1, 2008, or at least twelve months prior to the date when the product first becomes available in Massachusetts, whichever is later, and b) at least twelve months prior to any change to an existing code format. Manufacturers must display on the label any thinning recommendations and the VOC content of the coating, as well as additional labeling requirements for specific product categories.

Manufacturers must keep records demonstrating compliance with the VOC content limits, including information about the product, number of gallons sold in Massachusetts in containers greater than one liter and less than one liter; the CAS (Chemical Abstract Service) number for VOC constituents in the product; and the CAS number of any compounds in the product specifically exempted in the proposed amendments. Manufacturers must maintain records for at least five years from the date of manufacturing of each product, and upon request must submit this information within 90 days to MassDEP. Manufacturers no longer must submit a compliance certification to MassDEP as required in the current regulations.

v. Testing

Similar to the existing regulations, the proposed amendments allow MassDEP to request manufacturers to perform compliance testing. Testing for verification of compliance with the proposed VOC content limits must be done according to EPA’s test methods; however, CARB-approved alternative test methods can also be used with MassDEP approval.

B. Consumer Products Regulation

i. Applicability and Compliance Date

The proposed amendments apply to any person who sells, supplies, offers for sale, or manufactures certain chemically formulated consumer products for use in Massachusetts after January 1, 2009. They do not apply to any consumer product manufactured in Massachusetts for shipment and use exclusively outside of Massachusetts (however, these coatings should meet the standards in the state in which they are sold or used) or to any consumer product manufactured before January 1, 2009.

Since California and many other OTC states already have adopted consumer products rules with VOC limits similar to those that MassDEP is proposing, compliant products are currently available for most consumer product categories and will become available for other categories well in advance of the

⁶ Solid Air Fresheners and Toilet/Urinal Care Products that contain para-dichlorobenzene are subject to a one-year sell-through period, and the sell-through provisions would not apply to the manufacturing or sale of any aerosol adhesive product that contains methylene chloride, perchloroethylene, or trichloroethylene.

⁷ These coating categories comprise the majority of the recycled coatings.

applicable date for the proposed standards in Massachusetts. Manufacturers can achieve compliance with the proposed VOC limits by using product reformulations that are similar to the available compliant products in other jurisdictions.

ii. VOC Emission Standards

The current VOC limits for consumer products in Massachusetts are the same as EPA's limits. The proposed amendments lower the VOC limits for most of the existing consumer product categories and set new limits for several new product categories. Table C shows a comparison of the proposed VOC limits with the current limits.

In addition to lowering the VOC limits, the proposed amendments prohibit the use of air toxic contaminants in antiperspirants and deodorants and the use of certain air toxics in aerosol adhesives, contact adhesives, adhesive removers, electronic cleaners, electrical cleaners, footwear or leather care products, general purpose degreasers, and graffiti removers is also prohibited. The proposed amendments also establish special requirements for specific groups of product categories such as charcoal lighter materials, aerosol adhesives, and products containing ozone-depleting compounds. These requirements are consistent with CARB's rule.

Table C. Comparison of Proposed VOC Content Limits to Existing EPA Limits

Consumer Product Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Adhesive Removers		
Floor or Wall Covering	5	
Gasket or Thread Locking	50	
General Purpose	20	
Specialty	70	
Adhesives		
Aerosol		75 ¹
Mist Spray	65	
Web Spray	55	
Special Purpose Spray Adhesives		
Mounting; Automobile Engine Compartment; Flexible Vinyl	70	
Polystyrene Foam and Automobile Headliner	65	
Polyolefin and Laminate Repair/Edgebanding	60	
Contact		80
General Purpose	55	
Special Purpose	80	
Construction, Panel, Floor Covering	15	40
General Purpose	10	10
Structural Waterproof	15	15
Air Fresheners		
Single-Phase Aerosol	30	70
Double-Phase Aerosol	25	30
Dual Purpose Freshener/Disinfectant	60	
Liquids/Pump Spray	18	18
Solids/Gels	3	3
Antiperspirants		
Aerosol	40 HVOC ² 10 MVOC ³	60 HVOC
Non-Aerosol	0 HVOC 0 MVOC	
Anti-Static		
Non-Aerosol	11	
Automotive Brake Cleaners	45	
Automotive Rubbing or Polishing Compound	17	

Consumer Product Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Automotive Wax, Polish, Sealant or Glaze		
Hard Paste Waxes	45	
Instant Detailers	3	
All Other Forms	15	
Automotive Windshield Washer Fluid	35	35
Bathroom and Tile Cleaners		
Aerosols	7	7
All Other forms	5	5
Bug and Tar Remover	40	
Carburetor and Choke Cleaners	45	75
Carpet and Upholstery Cleaners		
Aerosols	7	
Non-Aerosols (Dilutables)	0.1	
Non-Aerosols (Ready-to-Use)	3.0	
Cooking Spray Aerosols	18	18
Deodorants		
Aerosol	0 HVOC 10 MVOC	20 HVOC
Non-Aerosol	0 HVOC 0 MVOC	
Dusting Aids		
Aerosols	25	35
All Other Forms	27	7
Engine Degreasers		75 ¹
Aerosols	35	
Non-Aerosols	5	
Electrical Cleaner	45	
Electronic Cleaner	75	
Fabric Protectants	60	75
Fabric Refresher		
Aerosol	15	
Non-Aerosol	6	
Floor Polishes/Waxes		
Products for Flexible Flooring Materials	7	7
Products for Nonresilient Flooring	10	10
Wood Floor Wax	90	90

Consumer Product Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Floor Wax Strippers⁴ For Removal of Light or Medium Build-Up of Polish For Removal of Heavy Build-Up of Polish	3 ⁵ 12 ⁶	
Foot ware or Leather Care Products Aerosol Solid All Other Forms	75 55 15	
Furniture Maintenance Products Aerosol All other Forms Except Solid or Paste	17 7	25
Graffiti Remover Aerosol Non-Aerosols	50 30	
General Purpose Cleaners Aerosols Non-Aerosols	10 4	10 ¹
General Purpose Degreasers Aerosols Non-Aerosol	50 4	
Glass Cleaners Aerosols All Other Forms	12 4	12 8
Hair Mousses	6	16
Hair Shines	55	
Hair Sprays	55	80
Hair Styling Gels	6	6
Hair Styling Products Aerosol and Pump Sprays All Other Forms	6 2	

Consumer Product Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Heavy-Duty Hand Cleaners or Soaps	8	
Insecticides		
Crawling Bug		40 ¹
Aerosol	15	
All Other Forms	20	
Flea and Tick	25	25
Flying Bug		35 ¹
Aerosol	25	
All Other Forms	35	
Foggers	45	45
Lawn and Garden		20 ¹
All Other Forms	20	
Non-Aerosol	3	
Wasp and Hornet	40	
Laundry Prewash		
Aerosol/Solids	22	22
All Other Forms	5	5
Laundry Starch Products	5	5
Metal Polishes/Cleaners	30	
Multi-Purpose Lubricant (Excluding Solid or Semi Solid Products)	50	
Nail Polish Removers	75	85
Non-Selective Terrestrial Herbicide - Non-Aerosols	3	
Oven Cleaners		
Aerosols/Pump Sprays	8	8
Liquid	5	5
Paint Remover or Stripper	50	
Penetrants	50	
Rubber and Vinyl Protectants		
Non-Aerosol	3	
Aerosol	10	
Sealants and Caulking Compounds	4	
Shaving Creams	5	5
Shaving Gel	7	
Silicone-Based Multi-Purpose Lubricants (Excluding Solid or Semi-Solid Products)	60	

Consumer Product Category	VOC Content Limit (g/l)	
	Proposed Rule	EPA Rule ^(a)
Spot Removers		
Aerosols	25	
Non-Aerosols	8	
Tire Sealants and Inflators	20	
Toilet/Urinal Care Products		
Aerosols	10	
Non-Aerosols	3	
Wood Cleaners		
Aerosols	17	
Non-Aerosols	4	
Undercoatings – Aerosols	40	

Notes:

^(a) A blank entry indicates that the specific category (or subcategory) is not defined under the federal rule.

¹ The federal rule has one limit for this category and does not include the subcategories in the proposed amendment.

² HVOC (High Volatility Organic Compound) means any volatile organic compound that exerts a vapor pressure greater than 80 mm Hg when measured at 20°C.

³ MVOC (Medium Volatility Organic Compound) means any volatile organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20°C.

⁴ The label of each non-aerosol floor wax stripper must specify a dilution ratio for light, medium, or heavy build-up of polish.

⁵ As-used VOC concentration limit after dilution for removal of light or medium build-up of polish

⁶ As-used VOC concentration limit after dilution for removal of heavy build-up of polish

iii. Flexibility Measures

The proposed amendments allow consumer products manufactured before the new VOC limits take effect on January 1, 2009 to be sold up to three years after the compliance date provided that the products complied with the limits in effect when they were manufactured. This “sell-through” provision reduces the cost that manufacturers and distributors would incur in pulling non-compliant coatings off their shelves.

The proposed amendments allow any person who cannot comply with the VOC limits due to an economic hardship to apply for a variance that would postpone compliance with the new limits. To receive a variance from complying with the VOC content standards of a consumer product, the applicant must submit a compliance report detailing the dates and the methods by which compliance with the regulation will be achieved.

The proposed amendments also allow a person who has received an Innovative Products Exemption from CARB to receive the same Exemption in Massachusetts (for the same products and duration approved by CARB), provided that a) such an Exemption was based on data that is valid in Massachusetts as well as in California, and b) the manufacturer submits a copy of the Exemption to MassDEP. A manufacturer that has not received an Innovative Products Exemption from CARB or has received an Innovative Products Exemption from CARB on California-specific data may apply directly to MassDEP for an Innovative Products Exemption.

The proposed amendments do not include the Alternative Compliance Plan (ACP) provisions, which are included in CARB’s consumer products rule and the OTC model rule, that allow manufacturers of consumer products to average VOC emissions among products to meet a VOC limit cap (i.e., some products in the ACP would not have to meet their applicable VOC limits provided that other products in the plan are below their applicable VOC limits and the total sales-adjusted VOC emissions for all products in the plan remain below a VOC cap calculated based on the applicable VOC standards and the sales volume of the products in the plan). While ACPs would provide some flexibility to manufacturers and distributors, MassDEP believes the resources required to set up and implement an ACP program are not warranted because: a) an ACP program would have no environmental benefit while implementation of such a program would be very resource intensive; b) few ACP applications have been received by CARB or OTC States; and, c) the VOC limits in the proposed amendments do not take effect until 2009, by which time MassDEP believes sufficient compliant products will exist and the ACP program will not be needed.

iv. Labeling, Recordkeeping, and Reporting Requirements

The proposed amendments require labeling and recordkeeping to ensure compliance with the VOC limits that are consistent with current EPA labeling and recordkeeping requirements.

Manufacturers must display the date (day, month, and year) or a code representing the date of manufacture on product and packaging labels. If a code other than the code specified by the proposed amendments is used, the manufacturer must file an explanation of the code with MassDEP by a) either January 1, 2008, or at least twelve months prior to the date when the product first becomes available in Massachusetts, whichever is later, and b) at least twelve months prior to any change to an existing code format. Additional labeling requirements apply to aerosol adhesives, adhesive removers, electronic cleaners, electrical cleaners, energized electrical cleaners, and contact adhesives.

Manufacturers must maintain records on site for at least five years from the date of manufacturing of each product, and upon request must submit this information within 90 days to MassDEP. Manufacturers no longer must submit a compliance certification to MassDEP as required in the current regulations.

v. Testing

Similar to the existing regulations, the proposed amendments allow MassDEP to request manufacturers to perform compliance testing. Responsible parties may determine compliance with VOC limits by testing

the VOC content of the product or by determining the VOC content based on the chemical constituents of the product, provided that consistent and accurate manufacturing records have been kept. The proposed amendments require that CARB's testing procedures or alternative testing procedures for which the manufacturer has received CARB's approval be used.

IV. EMISSION REDUCTIONS

A. AIM Coatings

MassDEP has used the same methodology⁸ that OTC used for its model rule, which in turn is based on CARB's methodology, to estimate VOC emission reductions that would be achieved from implementation of the proposed amendments for AIM Coatings. OTC estimated that VOC emissions after implementation of the EPA AIM coatings regulation would be 5.36 lbs/capita per year and that VOC emissions would decrease by 31 percent after implementation of the OTC model rule to 3.7 lbs/capita per year⁹.

According to MassDEP's statewide VOC emissions inventory for 2002¹⁰, the VOC emissions from the AIM coatings category is 17,227 tons per year or 61 tons per typical summer day. This is approximately 6.3 percent of the entire 2002 VOC emissions inventory, or 8.8 percent of the total VOC emissions inventory on a typical summer day¹¹. Implementation of the proposed amendments in 2009, the year in which the proposed AIM coatings VOC emission limits would take effect, would result in VOC emission reductions of approximately 5,425 tons in 2009 or 19.3 tons per typical summer day¹².

B. Consumer Products

MassDEP based its emission reduction estimates from implementation of the consumer products amendments on CARB's methodology^{13,14,15}. MassDEP's VOC inventory for 2002 shows VOC emissions from the consumer products category to be 22,690 tons per year (approximately 8.3 percent of the total VOC emissions inventory), or 62 tons per typical summer day (approximately 9 percent of the total VOC emissions inventory on a typical summer day). Implementation of the proposed amendments in 2009, the year in which the proposed consumer products VOC emission limits would take effect, would result in emission reductions of approximately 3,670 tons in 2009 or 10.1 tons per typical summer day.

⁸ E. H. Pechan and Associates, "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules," prepared for Ozone Transport Commission, March 31, 2001, pp. 14-15

⁹ The EPA rule emissions represent a combined value for architectural coatings, traffic markings, and industrial maintenance coatings, including high-performance maintenance and other special maintenance coatings. All of these categories are included under the OTC AIM Coatings model rule and the proposed Massachusetts AIM coatings amendments.

¹⁰ Total VOC emissions from all source categories in 2002 are estimated to be approximately 272,837 tons, or 694 tons per typical summer day.

¹¹ According to EPA emissions calculation guidance for the AIM coatings category, a seasonality factor of 1.3 can be applied to the average daily emissions during the ozone season to reflect the higher activity for coating operations during the ozone season.

¹² The population for 2009 was estimated by a linear regression based on the 2000 census and 2010 projected MISER data.

¹³ MassDEP's proposed amendments for Consumer Products are based on the 2006 OTC model rule, which is based on CARB's consumer products regulations, which were adopted in several phases. To estimate the VOC emissions and costs for the Massachusetts amendments, the relevant emission reductions and costs in various applicable phases of CARB's regulation adoption process were apportioned to Massachusetts and combined.

¹⁴ The details of the CARB consumer products emissions calculations may be found in the following documents:
State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulations," September 10, 1999, Volume II, Technical Support Document.
2) State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products," May 07, 2004, Volume II, Technical Support Document.

¹⁵ E. H. Pechan and Associates, "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules," prepared for Ozone Transport Commission, March 31, 2001, pp. 7-8.

V. ECONOMIC IMPACTS

The proposed AIM coatings and consumer products regulations are very similar to CARB's rules for AIM coatings and consumer products, and also similar to other OTC state rules. CARB extensively evaluated and quantified the economic impact of its regulations on affected businesses and consumers^{16,17}. MassDEP has relied on CARB's analysis¹⁸ in evaluating the economic impacts of the proposed amendments and has not undertaken any independent economic analyses.

CARB's economic analysis for its AIM coatings regulation relied on information supplied by manufacturers who market AIM coatings nationally and, therefore, its conclusions generally can be applied to Massachusetts¹⁹. Furthermore, OTC conducted an AIM coatings market survey that showed that compliant coatings existed in the Northeast OTR states that are comparable to coatings sold in California²⁰. Similarly, most consumer products are marketed nationally, and the findings of CARB's cost analysis can be assumed to be generally valid in the Northeast and in Massachusetts.

MassDEP assumes that AIM coatings and consumer products sales in California are comparable to the Northeast on a per capita basis and that population-adjusted economic costs based on CARB data can provide a conservative estimate of Massachusetts costs. Manufacturers likely will incur much lower costs in complying with the proposed amendments than the costs they incurred to comply with CARB regulations because reformulation costs for nationally marketed products have already been incurred. In addition, a number of other Northeast states have already adopted regulations based on the OTC model rules and manufacturers already are selling compliant products in these states, which could also be sold in Massachusetts.

Finally, it should be noted that CARB's economic analysis is conservative in that it did not incorporate savings from a number of factors that were too difficult to quantify, such as cross-line technology transfers for product development. For example, one-time research and development may apply to several products that a single manufacturer produces. Also, technology transfer between product lines and third-party contract manufacturers who make equivalent consumer products for competing businesses can reduce the cost of product reformulation. Another factor that can reduce costs is the existence of compliant products in a highly competitive market. Cost savings due to such factors were not included in the CARB analysis.

A. AIM Coatings

MassDEP believes that the proposed amendments are cost-effective and would not impose a significant economic burden on the regulated community or on consumers. Although there may be some increase in costs due to the proposed amendments, CARB's analysis shows that these costs can be absorbed by manufacturers and distributors without a significant effect on employment, business competitiveness and

¹⁶ The details of the CARB consumer products cost information may be found in the following documents: State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulations," September 10, 1999, Volume II, Technical Support Document.

State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products," May 07, 2004, Volume II, Technical Support Document.

¹⁷ The details of the CARB AIM coatings cost information may be found in the "Staff Report for the Proposed Suggested Control Measure for Architectural Coatings" dated June 2000, which accompanied the CARB SCM Executive Order.

¹⁸ OTC used CARB cost analyses to derive costs associated with implementation of its 2001 Consumer Products and AIM model rules, which MassDEP has partially used for its costs analyses.

¹⁹ In its economic analysis, CARB used the results of a cost survey that was sent to manufacturers that had responded to its latest survey (1998) in a series of surveys sent to architectural coatings manufacturers to track VOC emissions from architectural coatings. CARB also performed research to identify typical non-complying and complying formulations for 11 coating categories. Costs were identified for these formulations. The data collected in the cost survey were used to perform a cost-effectiveness analysis to determine the cost of the VOC control and to evaluate impacts on business profitability, employment and competitiveness.

²⁰ Information on the AIM survey may be found in the E.H. Pechan & Associates report "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules" dated March 31, 2001.

profitability, and cost to consumers. While there may be some increase in the purchase price of certain coatings, these increases are not significant. Most consumers, especially consumers of household paints, will be able to purchase compliant coatings that are currently available on the market, thus avoiding the reformulated products that may cost more. In addition, the proposed amendments have less stringent VOC limits than the CARB AIM Coatings regulations for certain coating categories (to account for climate conditions in the Northeast), which further reduces compliance costs²¹.

i. Cost Effectiveness

OTC estimated an average cost²² of \$6,400 per ton of VOC reduced based on CARB's cost analysis^{23,24}. In Massachusetts, this would amount to an estimated annual cost of \$34.7 million in 2009, the year in which the standards would take effect, or \$5.31 per Massachusetts resident for an average VOC emissions reduction of 5,425 tons per year or 19.3 tons per typical summer day²⁵. These costs represent an upper estimate and actual costs are expected to be much lower since compliant products already are available in the Northeast states. MassDEP believes that the proposed amendments are cost-effective given the health and environmental benefits of reductions in VOC emissions and ground-level ozone that will result from the proposed amendments.

ii. Potential Business and Consumer Impacts

The proposed amendments primarily would affect manufacturers of AIM coatings who may need to reformulate their products. Other businesses that may be affected are those that market, distribute, supply, sell or use AIM coatings, and businesses that supply ingredients and equipment to the manufacturers. Impacts on these sectors are discussed below.

Impact on Manufacturers and Distributors

MassDEP believes the proposed amendments will have a negligible impact on manufacturers of AIM coatings, especially since lower-VOC AIM coatings already are required in large markets of the U.S., including California and several states in the Northeast. In its analysis, CARB concluded that there would be no significant adverse impacts on profitability of most manufacturers or marketers of AIM coatings. The estimated change in return on owner's equity (ROE) due to implementation of the AIM coatings regulation, if all compliance costs are borne by the manufacturers and/or marketers of the coatings, was from negligible to a decline of about 2 percent. Because this change is far below a decrease of 10 percent in ROE, which indicates a potentially significant impact on profitability, CARB concluded that noticeable changes in employment, business creation, elimination or expansion, and business competitiveness would not be expected.

Impact on Consumers

MassDEP believes that the proposed amendments will have a negligible impact on consumers based on CARB's analysis. CARB estimated that the maximum potential increase to consumers (i.e., if all costs are borne by the consumer) for reformulated coatings would range from 12 to 30 percent of the current retail price. The majority of retail price increases, if any, would occur in the industrial maintenance and other commercial coatings areas. The impact of the projected cost increases would be less on household consumers because these consumers mostly use flat and non-flat coatings (such as household wall paint,

²¹ These include the 340 gram per liter VOC limit for industrial maintenance coatings, 550 gram per liter VOC limit for thermoplastic rubber coatings and mastics, 725 gram per liter VOC limit for conversion varnishes, 475 gram per liter VOC limit for calcimine recoaters, 780 gram per liter VOC limit for concrete surface retarders, 780 gram per liter VOC limit for impacted immersion coatings, and a 450 gram per liter VOC limit for nuclear coatings.

²² Weighted by emission reductions across all products.

²³ E. H. Pechan and Associates, "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules," prepared for Ozone Transport Commission, March 31, 2001, pp. 14-15.

²⁴ Estimates are in 2000 dollars.

²⁵ The emission reductions and costs were calculated as the difference between the emissions due to the federal rule and the OTC rule in 2009.

which is the majority of consumer purchases), and the increase in the price of these coatings would be substantially less. CARB estimated no increase in retail price of a typical reformulated flat paint (sold at an average pre-reformulation price of \$17.00 per gallon) and a maximum potential increase of \$3.70 (or 21 percent) for a typical reformulated non-flat paint (sold at an average pre-reformulation price of \$17.80 per gallon). Additionally, complying flat and non-flat coatings are currently available on the market at prices significantly lower than the projected prices. Competition from existing compliant coatings is likely to prevent manufacturers from passing on all their costs to consumers as CARB assumed in its analysis, resulting in lower price increases than estimated above.

B. Consumer Products

MassDEP believes that the proposed amendments are cost-effective and would not impose a significant burden on the regulated community or on consumers. While there may be some increase in costs due to the proposed amendments, these costs are expected to be minimal. In addition, since compliant products are already on the market due to the CARB rules and similar regulations adopted by other OTC states, compliance costs are likely to be much lower than those projected by CARB.

i. Cost Effectiveness

MassDEP used CARB's cost estimates to estimate the costs incurred in Massachusetts for compliance with the proposed amendments^{26, 27, 28}. In Massachusetts, in 2009, the year in which the proposed standards would take effect, these costs would amount to an estimated annual cost of \$4.2 million or \$0.64 per consumer per year for an average VOC emissions reduction of 10.1 tons per day²⁹ or 3,670 tons per year. These costs represent an upper bound estimate and actual costs are expected to be lower since compliant products already are available in the Northeast states. MassDEP believes that the proposed amendments are cost-effective given the public health and environmental benefits of reductions in VOC emissions and ground-level ozone that will result from the proposed amendments.

ii. Potential Business and Consumer Impacts

The proposed regulations primarily would affect manufacturers of consumer products who may need to reformulate their products. Businesses that market, distribute, supply, sell or use consumer products, and businesses that supply ingredients and equipment to the manufacturers of these products may also be affected by the proposed amendments. Impacts on these sectors are discussed below.

Impact on Manufacturers

MassDEP believes the proposed amendments will have a negligible impact on manufacturers of consumer products, especially since lower-VOC products already are required in large markets of the U.S., including California and several states in the Northeast. In addition, the proposed amendments include provisions for innovative product exemptions and variances that provide flexibility that could reduce any economic impacts of compliance.

CARB's economic analysis concluded that most manufacturers would be able to absorb compliance costs of the reformulated consumer products with no significant adverse economic impact, and that only a small

²⁶ The MassDEP's proposed amendments are based on the 2006 OTC model rule, which is based on CARB's regulations, which were adopted in several phases. To obtain cost estimates for the Massachusetts amendments, the relevant costs incurred in various phases of CARB's regulation adoption process were apportioned to Massachusetts and combined.

²⁷ E. H. Pechan and Associates, "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules," prepared for Ozone Transport Commission, March 31, 2001, pp. 7-8.

²⁸ State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products," May 07, 2004, Volume I, Executive Summary, pp 21.

²⁹ Unlike VOC emissions from AIM coatings, which are higher during the summer months, the VOC emissions from consumer products are fairly uniform throughout the year.

number of manufacturers may be adversely affected at all. In its business impact analysis, CARB conservatively assumed that manufacturers of consumer products would absorb all costs associated with the new VOC content requirements. However, some or all of these costs may be passed on to consumers.

Impact on Retailers and Distributors

MassDEP believes the proposed amendments will have a negligible impact on retailers and distributors of consumer products. A sell-through provision that allows retailers to sell consumer products manufactured prior to the compliance date of January 1, 2009, mitigates some cost impact to retailers. .

Distributors may be affected if some manufacturers decide to maintain a dual inventory of products, but most manufacturers contacted by CARB indicated that they would not manufacture dual inventories. There may also be some effect on distributors and retailers if any increase in the cost of products due to reformulation dampens customer demand. However, as discussed below, the average increase in the cost of products per unit is not expected to be significant.

Impact on Consumers

MassDEP believes the proposed amendments will have a negligible impact on Massachusetts' consumers and businesses that use consumer products. CARB estimated cost impacts to consumers from raw material costs used in consumer products. The estimated sales-weighted average cost is approximately \$0.19 per unit^{30, 31, 32}. CARB consumer cost estimates are conservative because, in its consumer impact analysis, CARB assumed that all costs would be passed on to consumers. Businesses that use consumer products would be affected by the proposed amendments in the same way as other consumers.

VI. IMPACT ON OTHER DEP PROGRAMS

A. Air Toxics

Air toxics are a group of chemical air contaminants, defined by EPA, that have been associated with wide-ranging and significant adverse health effects such as cancer, birth defects, and central nervous system impairments. The Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics. MassDEP implements MACT standards as EPA promulgates them. In addition, MassDEP controls air toxics through its Toxics Use Reduction Program and other programs that are aimed at reducing ozone. Many air toxics are VOCs, which are regulated as ozone precursors.

The proposed amendments to 310 CMR 7.25 will decrease VOC emissions from AIM coatings and consumer products, and because many VOCs are also air toxics, the proposed amendments will decrease the emissions of air toxics. The proposed amendments also include specific provisions that prohibit manufacture or sale of aerosol adhesives, contact adhesives, adhesive removers, electronic

³⁰ The Massachusetts' proposed amendments are based on CARB's regulations, which were adopted in several phases. To obtain cost estimates for the Massachusetts amendments, the relevant costs incurred in various applicable phases of CARB's regulation adoption process were combined.

³¹ For calculations related to the 1999 CARB regulation see: State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulations," September 10, 1999, Volume II, Technical Support Document, pp 220.

³² For calculations related to the 2005 CARB regulation see: State of California, AIR RESOURCES BOARD, "Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products," May 07, 2004, Volume II, Technical Support Document, pp VIII-176.

cleaners, electrical cleaners, footwear or leather care products, general purpose degreasers, and graffiti removers that contain the following air toxics: methylene chloride, perchloroethylene, or trichloroethylene.

B. Toxics Use Reduction

Toxics use reduction is defined as in-plant or in-process practices that reduce or eliminate the use and emissions of toxic materials into the environment. Implementation of toxics use reduction, when possible, is a MassDEP priority. The amendments to 310 CMR 7.25, which will ensure the use of AIM coatings and consumer products with lower VOC content, will result in toxics use reduction because many of VOCs used in AIM coatings and consumer products are also toxic.

VII. AGRICULTURAL IMPACTS

Pursuant to Massachusetts General Laws, Chapter 30A, Section 18, State agencies must evaluate the impact of proposed programs on agricultural resources within the Commonwealth. The proposed amendments to control VOC emissions from AIM coatings and consumer products are expected to have positive impacts on agricultural production in Massachusetts. VOCs are precursors to ground-level ozone, which adversely affects vegetation and some crops. Therefore, a reduction in VOC emissions will have a positive agricultural impact.

VIII. IMPACT ON MASSACHUSETTS MUNICIPALITIES

Pursuant to Executive Order 145, State agencies must assess the fiscal impact of new regulations on the Commonwealth's municipalities. The proposed amendments do not impose any direct costs, recordkeeping, reporting, or other requirements on local governments. Local governments that purchase products regulated under the proposed amendments to 310 CMR 7.25 would be affected in the same way that other consumers are affected. Although there may be some increase in the price of certain AIM coatings and consumer products due to reformulation, for many AIM coatings and consumer product categories, products that are compliant with the proposed amendments are currently available on the market at competitive prices. This mitigates the cost impact to consumers by a) reducing the potential that manufacturers will pass all compliance costs to consumers, and b) providing an option to consumers to purchase compliant products that are presently on the market and avoid reformulated products that may be offered at higher process. Consequently, MassDEP believes the economic impact of this regulation on Massachusetts municipalities will be insignificant.

IX. MASSACHUSETTS ENVIRONMENTAL POLICY ACT (MEPA)

The proposed amendments are "categorically exempt" from the "Regulations Governing the Preparation of Environmental Impact Reports," 301 CMR 11.00, because the proposed amendments will result in an overall decrease in emissions.

X. PUBLIC HEARINGS AND COMMENT

MassDEP plans to submit the final 310 CMR 7.25 regulations to EPA as part of its 8-hour ozone State Implementation Plan (SIP). Public hearings on the proposed 310 CMR 7.25 amendments will be conducted under the provisions of M.G.L. Chapter 30A